

Translation

PATENT COOPERATION TREATY

PCT/EP2003/008343



PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

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|---|---|---|
| Applicant's or agent's file reference P803154/WO/1 | FOR FURTHER ACTION See Form PCT/IPEA/416 | |
| International application No. PCT/EP2003/008343 | International filing date (day/month/year) 29 July 2003 (29.07.2003) | Priority date (day/month/year) 18 December 2002 (18.12.2002) |
| International Patent Classification (IPC) or national classification and IPC B60R 22/195 | | |
| Applicant DAIMLERCHRYSLER AG | | |

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 8 sheets, including this cover sheet.
3. This report is also accompanied by ANNEXES, comprising:
 - a. ☒ (sent to the applicant and to the International Bureau) a total of 3 sheets, as follows:
 - ☐ sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).
 - ☐ sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.
 - b. ☐ (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).

4. This report contains indications relating to the following items:

- ☒ Box No. I Basis of the report
- ☐ Box No. II Priority
- ☒ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☒ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

| | |
|--|--|
| Date of submission of the demand 22 January 2004 (22.01.2004) | Date of completion of this report 02 February 2005 (02.02.2005) |
| Name and mailing address of the IPEA/EP | Authorized officer |
| Facsimile No. | Telephone No. |

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Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

- ☐ This report is based on translations from the original language into the following language _____, which is language of a translation furnished for the purpose of:
- ☐ international search (under Rules 12.3 and 23.1(b))
 - ☐ publication of the international application (under Rule 12.4)
 - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)

2. With regard to the elements of the international application, this report is based on (replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report):

- ☐ The international application as originally filed/furnished
- ☒ the description:
- pages _____ 1-13 _____, as originally filed/furnished
- pages* _____ received by this Authority on _____
- pages* _____ received by this Authority on _____
- ☒ the claims:
- pages _____, as originally filed/furnished
- pages* _____, as amended (together with any statement) under Article 19
- pages* 1-13 received by this Authority on 13 January 2005 (13.01.2005)
- pages* _____ received by this Authority on _____
- ☒ the drawings:
- pages _____ 1-5 _____, as originally filed/furnished
- pages* _____ received by this Authority on _____
- pages* _____ received by this Authority on _____
- ☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.

3. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (specify): _____
- ☐ any table(s) related to sequence listing (specify): _____

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (specify): _____
- ☐ any table(s) related to sequence listing (specify): _____

* If item 4 applies, some or all of those sheets may be marked "superseded."

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Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non obvious), or to be industrially applicable have not been examined in respect of:

☐ the entire international application.

☒ claims Nos. 12,13

because:

☐ the said international application, or the said claims Nos. _____
relate to the following subject matter which does not require an international preliminary examination (*specify*):

☒ the description, claims or drawings (*indicate particular elements below*) or said claims Nos. 12,13
are so unclear that no meaningful opinion could be formed (*specify*):

See supplemental sheet

☐ the claims, or said claims Nos. _____ are so inadequately supported
by the description that no meaningful opinion could be formed.

☐ no international search report has been established for said claims Nos. _____.

☐ the nucleotide and/or amino acid sequence listing does not comply with the standard provided for in Annex C of the
Administrative Instructions in that:

the written form

☐ has not been furnished

☐ does not comply with the standard

the computer readable form

☐ has not been furnished

☐ does not comply with the standard

☐ the tables related to the nucleotide and/or amino acid sequence listing, if in computer readable form only, do not comply with
the technical requirements provided for in Annex C-bis of the Administrative Instructions.

☐ see Supplemental Box for further details.

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Box No. IV Lack of unity of invention

1. ☐ In response to the invitation to restrict or pay additional fees the applicant has:
- ☐ restricted the claims.
 - ☐ paid additional fees.
 - ☐ paid additional fees under protest.
 - ☐ neither restricted nor paid additional fees.
2. ☒ This Authority found that the requirement of unity of invention is not complied with and chose, according to Rule 68.1, not to invite the applicant to restrict or pay additional fees.
3. This Authority considers that the requirement of unity of invention in accordance with Rules 13.1, 13.2 and 13.3 is
- ☐ complied with.
 - ☐ not complied with for the following reasons:

4. Consequently, this report has been established in respect of the following parts of the international application:

☒ all parts.

☐ the parts relating to claims Nos. _____

Supplemental Box

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: III.1

**Non-establishment of opinion with regard to novelty,
inventive step and industrial applicability**

1. The application does not satisfy the requirements of PCT Article 6 because claim 12 is not clear:
 - The interaction between the displacement of the spiral hubs and the engagement of the pin disk with the perforated disk is not clearly defined; this is considered to be essential to the definition of the invention.
 - The terms "pin disk" and "perforated disk" are unclear. The location of the pin(s) is not defined. The same applies to the perforation in the perforated disk.
 - The extent to which grooves (39) can engage with openings (40) is not clear. The drawings (figures 5 and 6) do not provide any clarification.
2. The application does not satisfy the requirements of PCT Article 5 because the application does not disclose the invention in claims 12-13 in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art.
 - Figures 5 and 6 do not show parts 37, 38 and 39 with sufficient accuracy for them to be identified as "pin disk", "perforated disk" and "grooves". The description (from page 12, third paragraph, to page 13) does not provide any

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Supplemental Box

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: III.1

further information defining these terms more precisely.

- Furthermore, the last paragraph (page 13) appears to be contradictory. It appears to indicate that power is transmitted from the motor 20 to the ratchet 13 until the pin disk 37 re-engages in the perforated disk 38. This appears to conflict with the last two paragraphs on page 12.

Supplemental Box

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: IV

Lack of unity of the invention

This Authority has determined that the international application contains multiple inventions or groups of inventions that are not so linked as to form a single general inventive concept (PCT Rule 13.1), as follows:

I: Claims 1-5

Seatbelt lock with a preventive tensioning device

II: Claims 6-9

Deflection unit for a seatbelt lock with a preventive tensioning device

III: Claims 10-11

Synchronisation unit for a seatbelt lock with a preventive tensioning device

IV: Claims 12-13

Synchronisation unit for a seatbelt lock with a preventive tensioning device

The reasons are as follows: the four independent claims 1, 6, 10 and 12 have only the following common feature "seatbelt lock with a preventive tensioning device", which is well-known from the prior art.

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Supplemental Box

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: IV

The application thus fails to meet the requirement of unity of invention, since there is no technical relationship among the subjects of claims 1, 6, 10 and 12 (PCT Rule 13.2).

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V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

| | | | |
|-------------------------------|--------|------|-----|
| Novelty (N) | Claims | 1-11 | YES |
| | Claims | | NO |
| Inventive step (IS) | Claims | 1-11 | YES |
| | Claims | | NO |
| Industrial applicability (IA) | Claims | 1-11 | YES |
| | Claims | | NO |

2. Citations and explanations

1. Invention I

Claims 1-5 satisfy the requirements of PCT Article 33(2) to (4), because their subject matter is novel, involves an inventive step and is industrially applicable.

1.1 DE 199 41 435 A (D1) (see figures 1 and 2; and column 5, line 22 to column 6, line 4) discloses the features appearing in the preamble of claim 1, namely a

(the reference signs relate to D1)

"seatbelt lock 11 with a preventive tensioning device, which device moves the seatbelt lock from an operating position to a lower safety position (see column 5, line 40 to column 6, line 4), and which device comprises an energy storage mechanism 19 and a drive unit 35, the seatbelt lock 11 being held under pretension in the operating position by the energy storage mechanism 19 (see column 5, line 40 to column 6, line 4), and the drive unit 35 returning the seatbelt lock 11 from the safety position to the

operating position (see column 5, lines 24-34)".

The subject matter of claim 1 differs from the seatbelt lock known from D1 by virtue of the features in its characterising part. D1 indeed discloses no comfort position that is higher than the operating position (position while vehicle is in motion and no risk is detected). The subject matter of claim 1 is therefore novel.

This difference makes insertion of the belt tongue easier and thus enhances comfort. The problem addressed could be considered that of enhancing comfort. The available prior art does not suggest this difference. The subject matter of claim 1 therefore involves an inventive step.

The subject matter of claim 1 relates to a seatbelt lock used in motor vehicles and is therefore likewise industrially applicable.

- 1.2 The subject matter of dependent claims 2-5 is inevitably novel, involves an inventive step and is industrially applicable.

2. Invention II

Claims 6-9 satisfy the requirements of PCT Article 33(2) to (4), because their subject matter is novel, involves an inventive step and is industrially applicable.

- 2.1 EP 0 711 687 A (D5) discloses a deflection unit for a seatbelt lock with a preventive tensioning device and represents the prior art closest to claim 6.

The subject matter of claim 6 differs from the deflection unit known from D5 by virtue of the features in its characterising part. The subject matter of claim 6 is therefore novel.

These features define a ratchet-and-pawl mechanism which automatically permits a reversing process by means of the synchronisation function. This ratchet-and-pawl mechanism is neither known from nor suggested by the prior art. The subject matter of claim 6 therefore involves an inventive step.

The subject matter of claim 6 relates to a deflection unit for a seatbelt lock and is therefore used in motor vehicles. It is thus industrially applicable.

- 2.2 The subject matter of dependent claims 7-9 is inevitably novel, involves an inventive step and is industrially applicable.

3. Invention III

Claims 10 and 11 satisfy the requirements of PCT Article 33(2) to (4), because their subject matter is novel, involves an inventive step and is industrially applicable.

- 3.1 D1 and DE 202 09 965 U (D2) disclose synchronisation units which lock a spring inside a housing. These documents are considered to be the prior art closest to claim 10. The subject matter of claim 10 differs from the synchronisation unit known from D1 or D2 by virtue of the features in its characterising part.

The subject matter of claim 10 is therefore novel.

The use of locking blocks inside a housing for the spring of a seatbelt lock tensioning device cannot be considered a conventional measure and is not known from the prior art. The subject matter of claim 10 therefore involves an inventive step.

The subject matter of claim 10 relates to a synchronisation unit for a seatbelt lock and is therefore used in motor vehicles. It is thus industrially applicable.

- 3.2 The subject matter of dependent claim 11 is inevitably novel, involves an inventive step and is industrially applicable.